

Extent of Burnout Among Teachers of Vocational Agriculture in Ohio

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Teachers of vocational agriculture have long been noted for being hard workers. It is not unusual to hear vocational agriculture teachers complain about long hours and having more work to complete than is humanly possible. They are also constantly in close contact with people. Furthermore, vocational agriculture teachers have little in the way of a career ladder of opportunities for career advancement within the profession of teaching vocational agriculture.

Based on the work by Maslach (1982), Pines and Aronson (1981), Freudenberger (1974), Freudenberger and Richelson (1980) and others, it is reasonable to expect that, under such conditions, a phenomenon called burnout may be present. Freudenberger and Richelson (p. 14) define burnout as: ". . . to deplete oneself. To exhaust one's physical and mental resources. To wear oneself out by excessively striving to reach some unrealistic expectation imposed by oneself or by the values of society."

The model for this study suggests that as the individual encounters stress, if the stress is dissipated via the use of good coping strategies, there is no problem. However, if the stress is not dissipated, then strain develops, and as the strain surpasses the individual's threshold of tolerance, burnout ensues.

Since there was no information regarding the extent of burnout among vocational agriculture teachers, the researchers felt this study was needed.

Purpose and Objectives

The purpose of this study was to determine the extent of burnout among vocational agriculture teachers in Ohio. Furthermore, the study sought to determine the relationship of burnout to job satisfaction and coping skills.

This study was designed to answer the following research questions:

1. What is the extent of burnout among vocational agriculture teachers in Ohio?
2. To what extent is burnout correlated with job satisfaction and coping skills?

Procedures

Population and Sample

The population for the study consisted of 544 vocational agriculture teachers in Ohio (N = 544). A census was conducted for the following groups: FBPA teachers (N = 32), female production agriculture teachers (N = 6), and production agriculture teachers at joint vocational schools (N = 8). A random sample was drawn from the production agriculture teachers in single teacher departments (N = 214; n = 117), production agriculture teachers in multiple teacher departments (N = 88, n = 49), from the agricultural mechanics teachers (N = 97, n = 80), from the professionally prepared horticulture teachers (N = 32, n = 27) and from horticulture teachers from industry (N = 67, n = 53). This sampling design was utilized to enable the researchers to generalize to specific strata of the overall population during subsequent analyses of the data.

Three hundred seventy-two subjects were asked to participate in the study. Usable responses were received from 322 teachers for an 86.6% rate of return.

Design and Instrumentation

This was a descriptive correlational study.

Burnout was measured by using the Maslach Burnout Inventory (MBI). The MBI measures three dimensions of burnout: emotional exhaustion, which measures feelings of being overextended and exhausted by one's work; depersonalization, which measures feelings of impersonal responses and responses without feeling toward one's students; and personal accomplishment, which measures feelings of competence and successful achievement as related to working with students. Each dimension contains two measures: one for frequency of occurrence and one for intensity of the experience.

Maslach validated the instrument and demonstrated its reliability. The Cronbach's alpha reliability coefficients for the six burnout scores (three subscales, two dimensions each) were all above .72 for this study.

The Brayfield-Rothe "Job Satisfaction Index" as modified by Warner (1973) was used to measure job satisfaction in this study. The validity and reliability of the instrument were established by Brayfield and Rothe (1951). The authors judged the instrument to have face validity and established its reliability via the Cronbach alpha procedure as .90.

The Personal Resources Questionnaire (PRQ) developed by Osipow and Spokane (1983) was used to measure the coping ability of the vocational agriculture teachers. The PRQ measures four sets of coping behaviors: recreation resources, which reflects the use of recreational activities as a distractor from stressful events; self care/personal coping, which reflects the ability to utilize healthful habits; social support, which emphasizes family, friends and social groups; and rational/cognitive coping, which measures the effective management of one's time, effort and reactions to reduce stress.

The validity of the PRQ has been established through field and pilot tests. The present study generated subscale Cronbach's alpha coefficients of: recreation, .59; self care, .61; social support, .84; and rational/cognitive coping, .81.

Readers should note that three questions were unintentionally omitted from the recreation and physical coping subscales, reducing these subscales to seven items each. The authors judge the subscales to still have face validity and their reliability was .59 and .61 as noted above.

Demographic data were gathered using a survey form developed by Newcomb and Betts (1985).

Data Collection

Data were collected by mailed questionnaire. The original mailing generated 249 responses (70%). Follow-up letters generated 75 additional responses. The total respondents for this study were 324 (87.1%). Two questionnaires were found to be unusable. Thus, the responding sample was 322 (86.6%). A random sample of five non-respondents was interviewed by telephone. No significant differences were noted between respondents and non-respondents.

Results

Description of Sample

The typical vocational agriculture teacher in this study was a married male 38 years old. Seventy-seven percent of the vocational agriculture teachers had children, 35% had a master's degree, and 45% had a bachelor's degree.

The respondents had an average length of service in teaching of 11.5 years.

Introduction to Burnout Measure

For emotional exhaustion and depersonalization, the higher the score the higher the level of burnout for the dimension being measured. For personal accomplishment, the higher the score the lower the level of burnout for the dimension being measured. Scores were considered to be in the high burnout category if they fell in the upper third of the normative distribution as developed by Maslach.

Emotional Exhaustion: Frequency and Intensity

On the frequency dimension of emotional exhaustion, 17% of the vocational agriculture teachers were in the high burnout category (Table 1); on the intensity dimension, 23% were in the high burnout category.

Depersonalization: Frequency and Intensity

Twenty-seven percent of the vocational agriculture teachers received scores placing them in the high burnout category for the frequency dimension (Table 1); 39% were in the high burnout category for the intensity dimension.

Personal Accomplishment: Frequency and Intensity

Twenty-nine percent of the vocational agriculture teachers were found to experience a high level of burnout on the frequency dimension (Table 1); 30% were in the high burnout category on the intensity dimension of personal accomplishment.

Table 1
Burnout Scores

Level of Burnout	MBI Subscales											
	Emotional Exhaustion-Frequency		Emotional Exhaustion-Intensity		Depersonalization-Frequency		Depersonalization-Intensity		Personal Accomplishment-Frequency		Personal Accomplishment-Intensity	
	N	%	N	%	N	%	N	%	N	%	N	%
High	55	17.1	73	22.7	86	26.7	124	38.5	93	28.9	96	29.8
Moderate	119	36.9	103	32.0	147	45.7	83	25.8	101	31.4	133	41.3
Low	148	46.0	146	45.3	89	27.6	115	35.7	128	39.7	93	28.9
Totals	322	100.0	322	100.0	322	100.0	322	100.0	322	100.0	322	100.0
Mean	20.62		27.87		9.24		11.52		36.88		39.91	
S.D.	9.47		13.04		4.79		7.56		6.89		6.74	

Job Satisfaction

This instrument consisted of a five-point Likert-type scale with 1 representing strongly disagree and 5 representing strongly agree. Scores could range from 14 to 70. The mean for the overall scale was 58.2, indicating that on the average the teachers were in agreement with statements indicating job satisfaction.

About 24% of the teachers strongly agreed with statements indicating that they were satisfied with their jobs (Table 2). An additional 68% agreed with such statements; 9% of the teachers marked undecided or disagree for the statements pertaining to job satisfaction.

Table 2

Frequency Distribution of Job Satisfaction Scores (n=322)

Range of Satisfaction Scores	N	%
22-35 (Disagree)	1	.3
36-49 (Undecided)	27	8.4
50-63 (Agree)	218	67.7
64-70 (Strongly agree)	76	23.6
Total	322	100.0

Note. Mean = 58.24; S.D. = 6.66.

Resources for Coping

The resources for coping instrument contained subscales that dealt with the individual's resources for coping in the areas of recreation, self care, social support and rational coping. Data are reported in Table 3. Osipow and Spokane (1983) developed normative data, and results for this population are reported according to the quartile of the normative group into which their scores fell. Approximately 85% of the vocational agriculture teachers placed in the first or second quartile on the recreation subscale. On the self care subscale, about 85% were in the first or second quartile. For social support, 93% of the vocational agriculture teachers scores fell in the third and fourth quartiles. Likewise, about 87% scored in the third and fourth quartiles on the rational coping subscale.

Relationship Between Burnout and Job Satisfaction

The degree of relationship between burnout and job satisfaction was calculated by using the Pearson product moment correlation (Table 4). Moderately negative relationships (using values assigned by Davis, 1971) were found between job satisfaction and both dimensions of emotional exhaustion and depersonalization. A moderately positive relationship existed between job satisfaction and both dimensions of personal accomplishment.

Table 3

Personal Resources for Coping Scores

Quartile	Personal Resources for Coping Subscales							
	Recreation ^a		Self Care ^a		Social Support		Rational Coping	
	N	%	N	%	N	%	N	%
First (10-19)	83	25.8	114	35.4	2	.6	1	.3
Second (20-29)	190	59.0	162	50.3	21	6.5	40	12.5
Third (30-39)	46	14.2	45	14.0	64	19.9	174	54.0
Fourth (40-50)	3	1.0	1	.3	235	73.0	107	33.2
Totals	322	100.0	322	100.0	322	100.0	322	100.0
Mean	17.2		16.49		42.1		36.84	
S.D.	4.1		4.58		6.9		5.96	

^aThe reader should note that these were 7 item subscales as reported in the narrative section.

Table 4

Relationship Between Job Satisfaction and Burnout Subscales (n = 322)

Variable	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	Freq.	Intensity	Freq.	Intensity	Freq.	Intensity
Job Satisfaction	-.49	-.41	-.44	-.35	.35	.30

Relationship Between Burnout and Personal Resources for Coping

The relationship between recreation and burnout was characterized by being low to moderate and negative for the emotional exhaustion and depersonalization subscales (Table 5). The relationship was low to moderate and positive for both dimensions of personal accomplishment. There were negative low to moderate relationships between emotional exhaustion and depersonalization and self care, social support and rational coping. A low to moderate positive relationship was found when these subscales were correlated with both dimensions of personal accomplishment.

Table 5

Relationship Between Burnout Subscales and Coping Subscales (n=322)

Variable	Recreation	Self Care	Social Support	Rational Coping
Emotional Exhaustion-Frequency	-.32	-.30	-.26	-.37
Emotional Exhaustion-Intensity	-.30	-.31	-.25	-.35
Depersonalization-Frequency	-.21	-.20	-.29	-.24
Depersonalization-Intensity	-.13	-.22	-.21	-.22
Personal Accomplishment-Frequency	.21	.19	.28	.27
Personal Accomplishment-Intensity	.19	.14	.13	.24

Conclusions and Recommendations

Conclusions

1. When 17-30% of the vocational agriculture teachers in a state are in the high burnout category, it is imperative that the leadership in the state take action to educate teachers about stress coping and burnout. There are fewer of these teachers in the high burnout category than for the normative group (33.3% of normative group in high burnout category, by definition). However, based on other research, they are experiencing more burnout than Ohio Cooperative Extension Service agents (about 12-15% in high burnout category, Igodan & Newcomb, 1986).

2. The Ohio teachers are fairly satisfied. Their mean score puts them at the "agree" level in the satisfaction scale. This is important because of the extent to which job satisfaction is negatively correlated with burnout.

3. The extent of correlation between burnout and coping lends credence to the model used in this study.

4. These teachers are making better use of the social support and rational/cognitive areas of coping than the normative group studied by Osipow and Spokane. They are making poor use of the coping skills recreation and self care as compared to the normative group. This has important implications for intervention strategies which should be pursued.

Recommendations

1. Agricultural supervisors in the Ohio Department of Education, local vocational supervisors and vocational agriculture teachers should be made aware of the phenomenon of burnout and the extent to which it is

present among vocational agriculture teachers. High school administrators with vocational agriculture programs should also be provided with information on this topic.

2. Support systems should be established to assist in coping with burnout. Closer county teacher networks would be desirable. It would also be useful to provide workshops for teachers focusing on developing coping skills.

3. Teachers should be encouraged to make greater use of recreational and self-care coping skills.

4. A job analysis of the vocational agriculture teachers should be examined to determine duties of the job which may lead to stress or strain.

5. This study should be replicated in other states of the United States to determine if the findings differ from those in this study.

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